



COMMONWEALTH OFFICE
OF BROADBAND OUTREACH
AND DEVELOPMENT
Promoting a 21st century economy

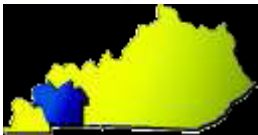
Brian E. Kiser
Executive Director

Dana Case
Program Administrator

Mission Statement

To accelerate the expansion of sustainable broadband access and adoption in the Commonwealth by determining the characteristics of broadband availability and use in Kentucky, and promoting the value of broadband to improve the lives of citizens.

West Region Broadband Work Group



- **Abby Caldwell, KCADD**
- **Brad Davis, Purchase ADD**
- **Jennifer Beck-Walker, Purchase ADD**
- **Jiten Shah, Green River ADD**
- **Sheryl Chino, Green River ADD**
- **Chris Sutton, Pennyriple ADD**
- **Jason Vincent, Pennyriple ADD**

Mapping and Planning

Baker

Bob Lois
Program Manager

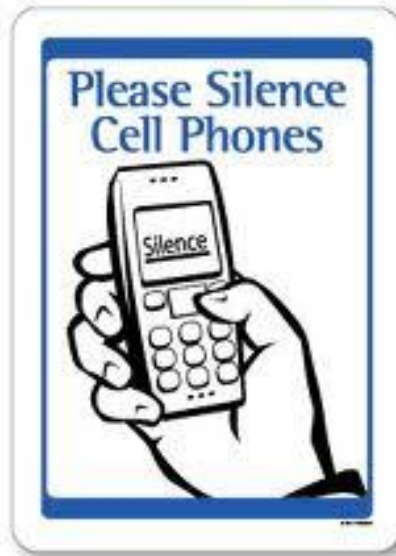
Bill Bates
Project Manager

Wendall McCarty
Outreach Manager

Derek Murphy
Project Manager

Workshop Agenda

- | | |
|--|-----------------|
| 1. Introduction | 10:00am-10:20am |
| 2. Project Area Analysis | 10:20am-11:20am |
| 3. Project Area Priorities Identification | 11:20am-12:20pm |
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Where we have been:

- **October 2010** – Grant received for Broadband Outreach and Development – Office Created
- **Broadband Map** created with Provider submitted Data – updated every 6 months - ~76% of State Providers participate
- **Fall 2010 -- Survey 1** – “Broadband Availability” – 1400 +/- responses
- **March 2012 -- Survey 2** -- “Broadband Utilization” – 6000 +/- responses

Where we have been:

- Two reports:
 - ✓ *“Regional Broadband Utilization Analysis in the Commonwealth of Kentucky” – November 2011*
 - ✓ *“Utilization and Impact of Broadband for Businesses, Organizations and Households” – May 2012*
- Pilot Project – Community Action Kentucky – *Launched*
- Central Planning Session – *Regional Efforts Begin*
- And Now – Regional Planning Work Shops - Generate buy-in and commitment to impact broadband availability, adoption or utilization priorities in 5 Regional Project Areas

Regional Planning Work Shops:

- 1.) *The Regions* – Established by group consensus during the CPS in May -- combining current ADD boundaries to ensure that new Regions were made strategically.**
- 2.) *Goals, Plans and Statement of Work* – have been developed by Regional Workgroups -- *UNIQUE TO EACH REGION***
- 3.) And now, the most important part of the planning project – Identify and prioritize key issues facing the Project Area and begin to operationalize Project Area goals into action plans**

This is where we all can make a difference!

Regional Plans:

- 1.) Specific for the needs within the Region**
- 2.) Outlines a specific strategy to achieve the goals**

Purpose of Regional Plans:

- 1.) Promote broadband awareness and adoption**
- 2.) Promote investments in broadband infrastructure**
- 3.) Enlist involvement of local and regional stakeholders**
- 4.) Engage the providers in the Commonwealth.**

Project Area Scope of Work

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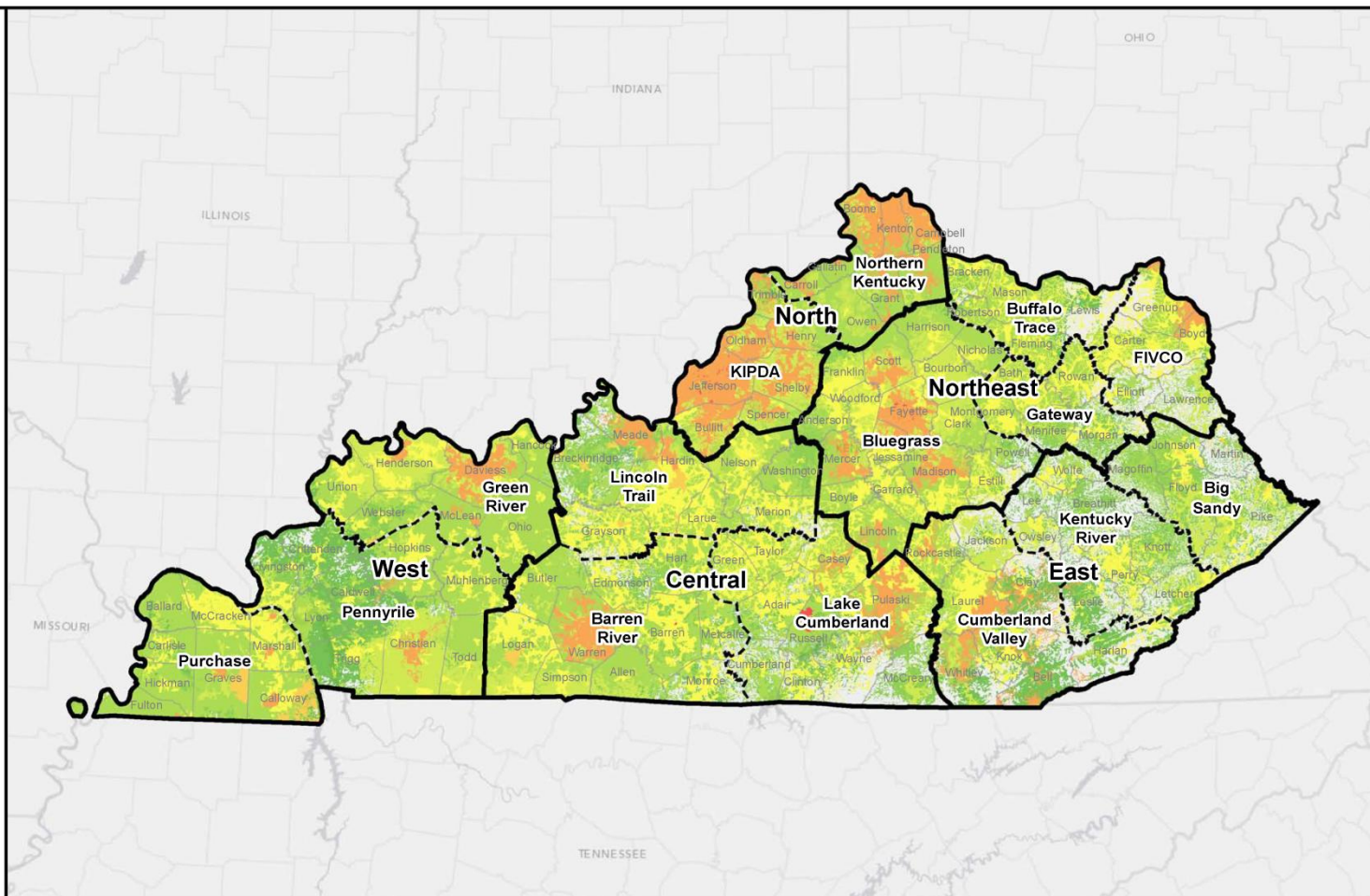
Legend

Boundary

- Region
- ADD
- County

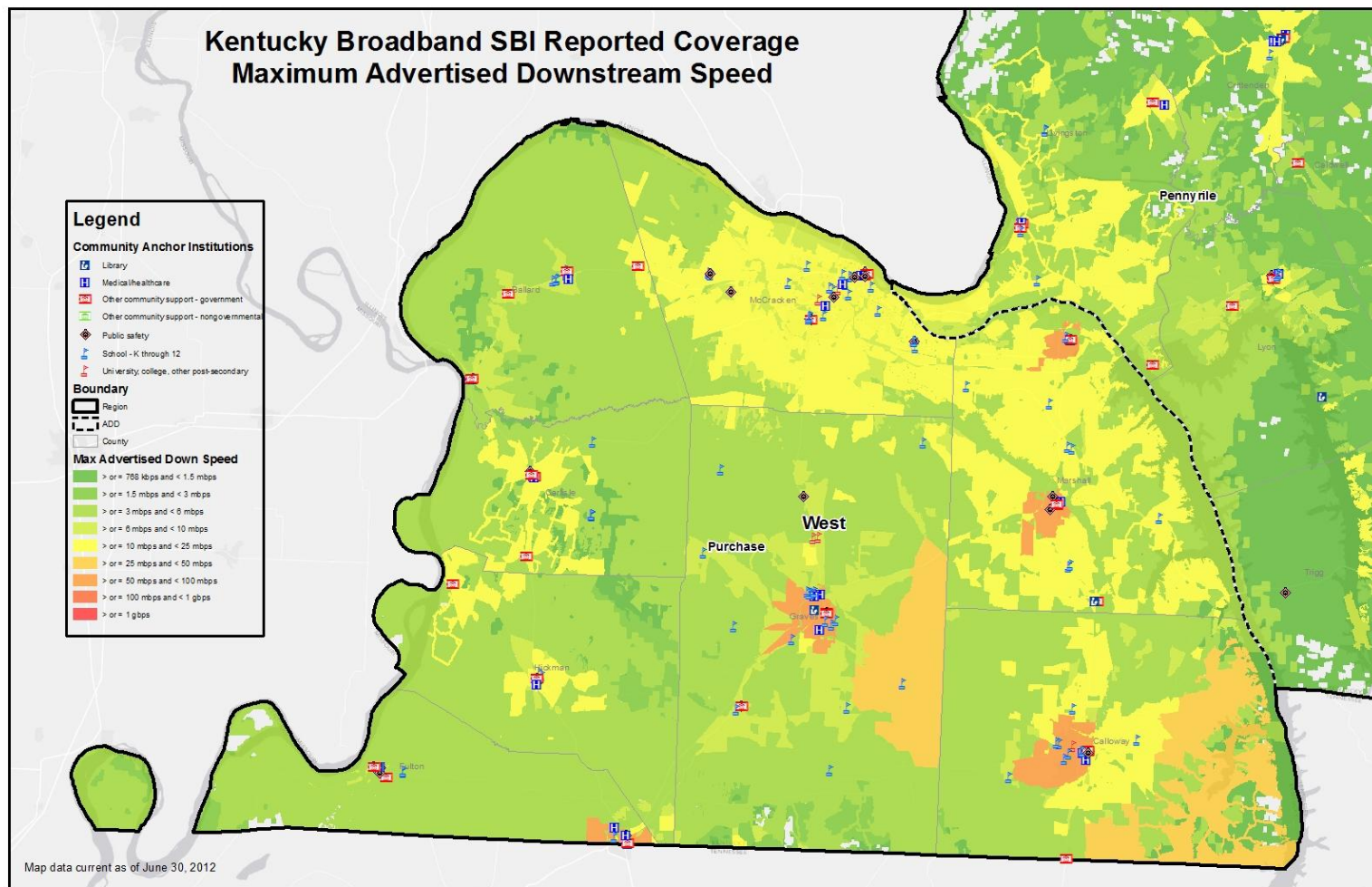
Max Advertised Down Speed

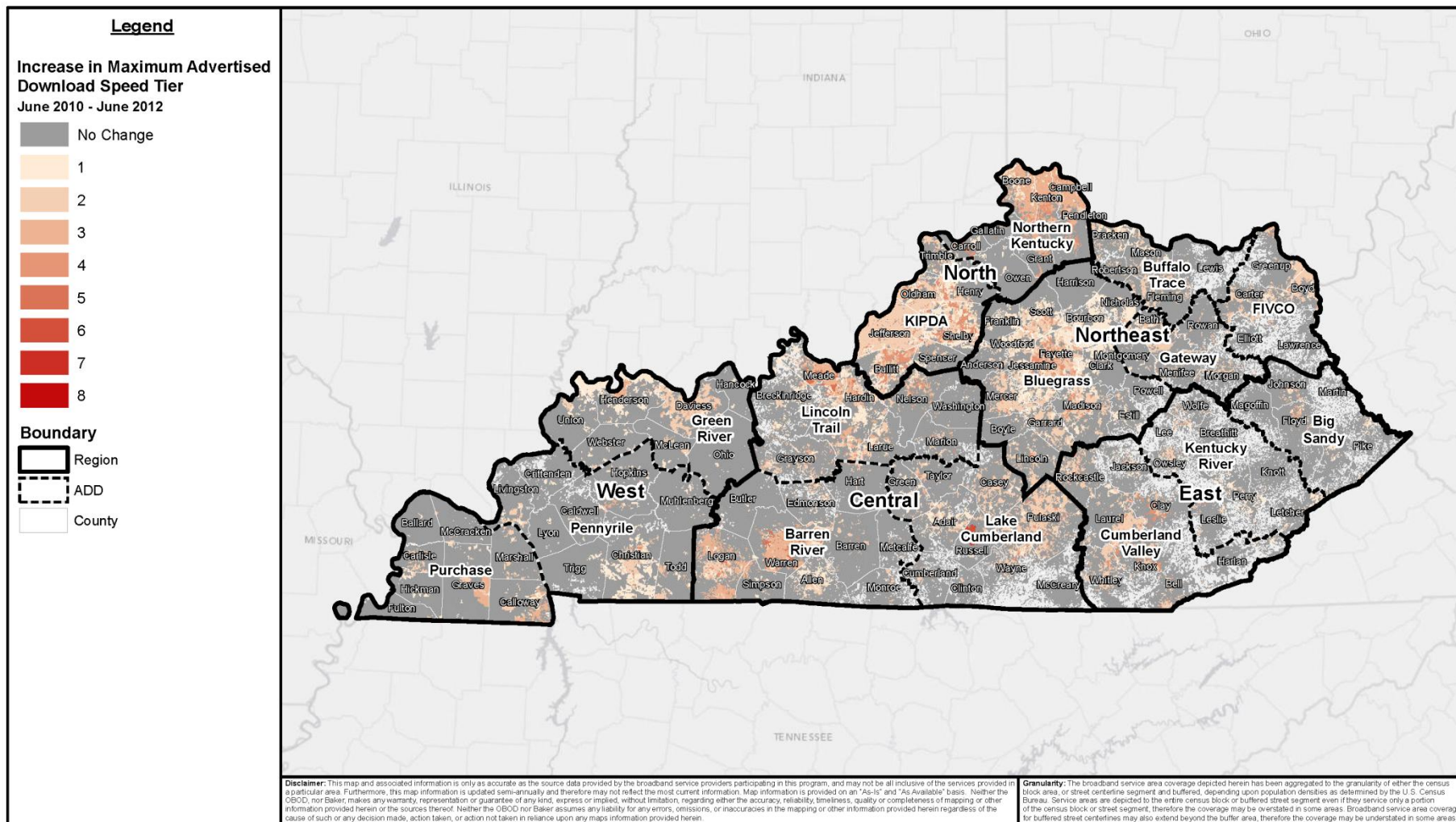
- > or = 768 kbps and < 1.5 mbps
- > or = 1.5 mbps and < 3 mbps
- > or = 3 mbps and < 6 mbps
- > or = 6 mbps and < 10 mbps
- > or = 10 mbps and < 25 mbps
- > or = 25 mbps and < 50 mbps
- > or = 50 mbps and < 100 mbps
- > or = 100 mbps and < 1 gbps
- > or = 1 gbps



Disclaimer: This map and associated information is only as accurate as the source data provided by the broadband service providers participating in this program, and may not be all inclusive of the services provided in a particular area. Furthermore, this map information is updated semi-annually and therefore may not reflect the most current information. Map information is provided on an "As-Is" and "As Available" basis. Neither the OBOD, nor Baker, makes any warranty, representation or guarantee of any kind, express or implied, without limitation, regarding either the accuracy, reliability, timeliness, quality or completeness of mapping or other information provided herein or the sources thereof. Neither the OBOD nor Baker assumes any liability for any errors, omissions, or inaccuracies in the mapping or other information provided herein regardless of the cause of such or any decision made, action taken, or action not taken in reliance upon any maps information provided herein.

Granularity: The broadband service area coverage depicted herein has been aggregated to the granularity of either the census block area, or street centerline segment and buffered, depending upon population densities as determined by the U.S. Census Bureau. Service areas are depicted to the entire census block or buffered street segment even if they service only a portion of the census block or street segment. Therefore the coverage may be overstated in some areas. Broadband service area coverage for buffered street centerlines may also extend beyond the buffer area, therefore the coverage may be understated in some areas.





Kentucky Broadband Increase in Maximum Advertised Download Speed Tier

Legend

Increase in Maximum Advertised
Download Speed Tier
June 2010 - June 2012

■ No Change

■ 1

■ 2

■ 3

■ 4

■ 5

■ 6

■ 7

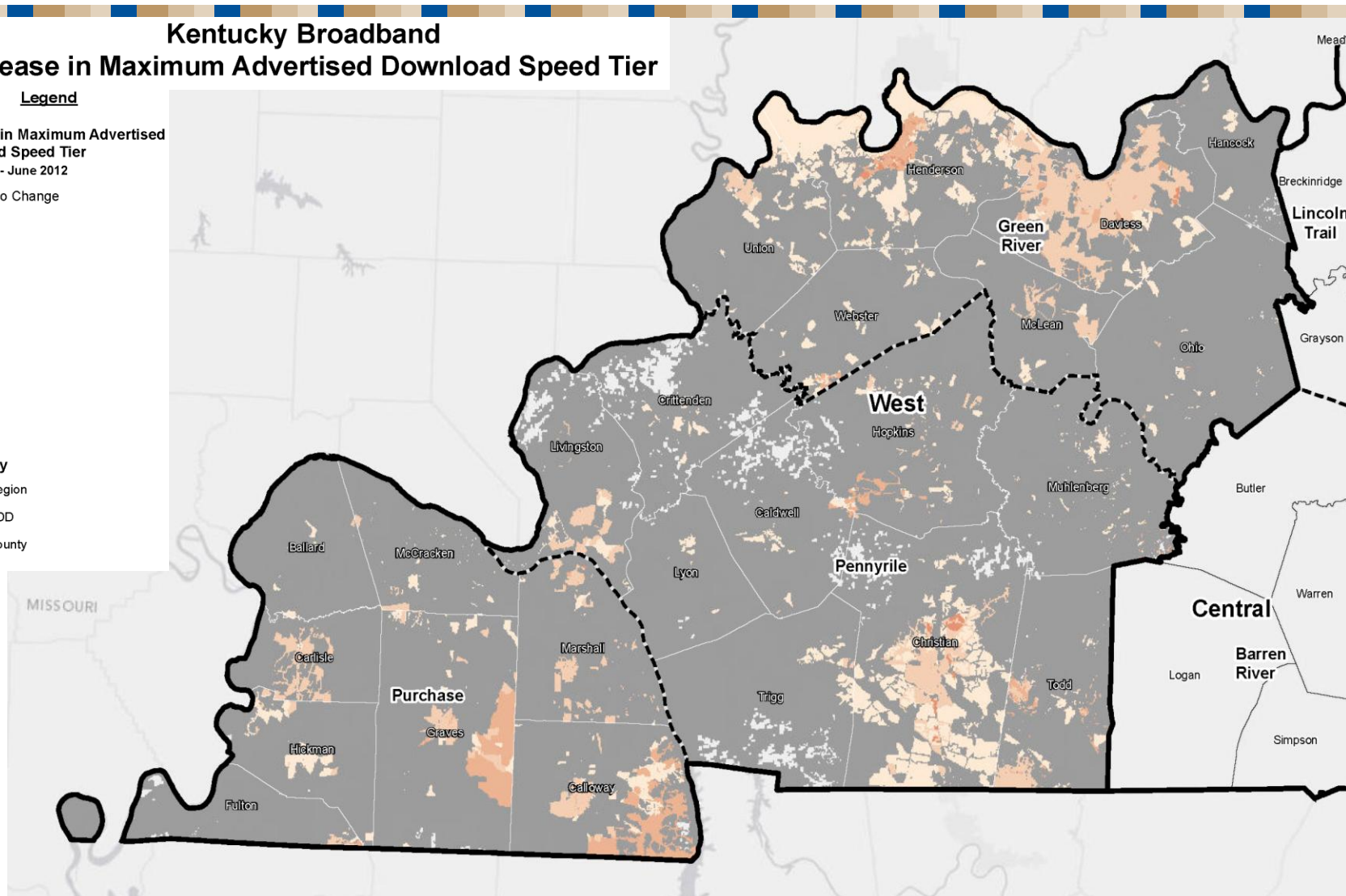
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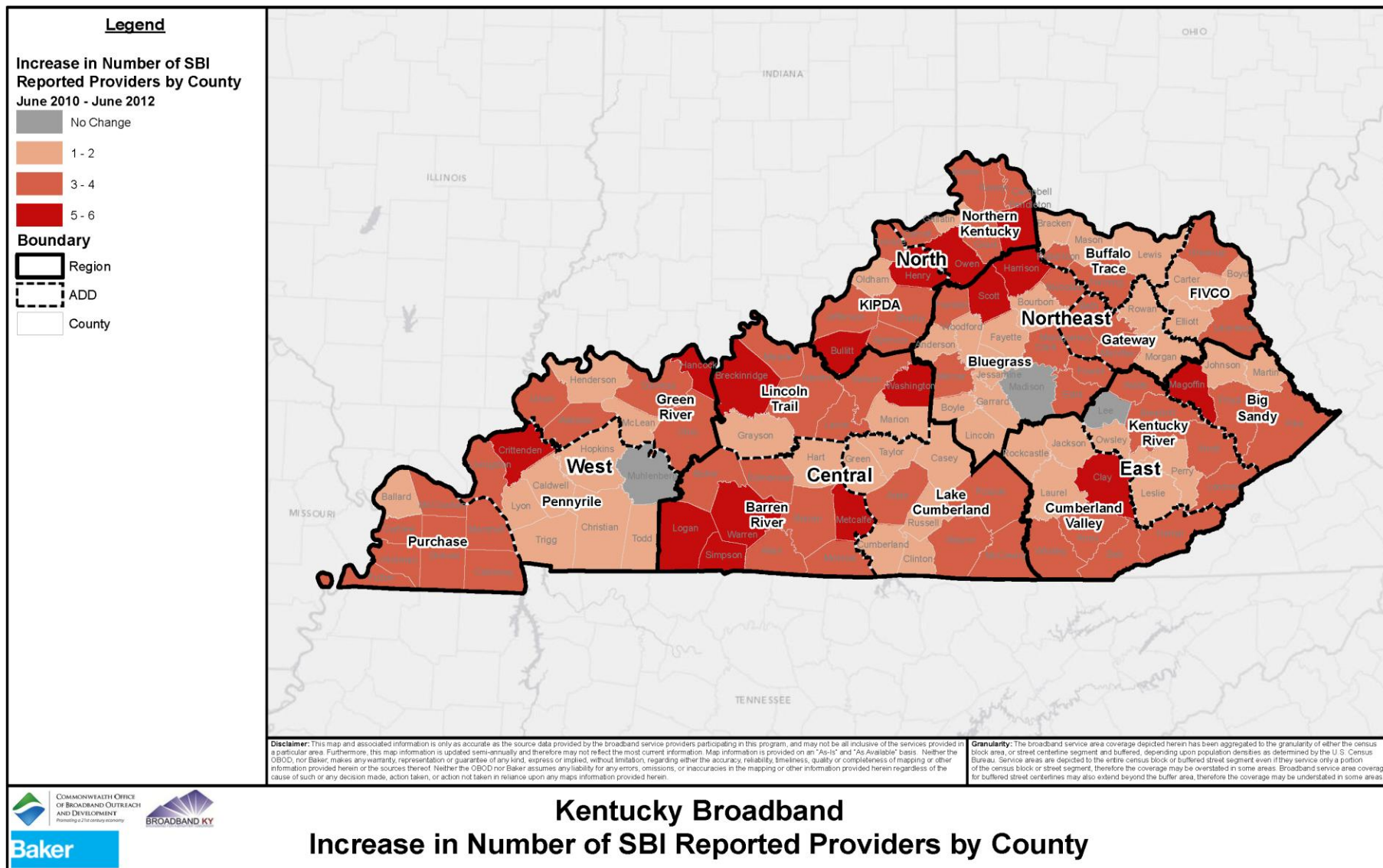
Boundary

■ Region

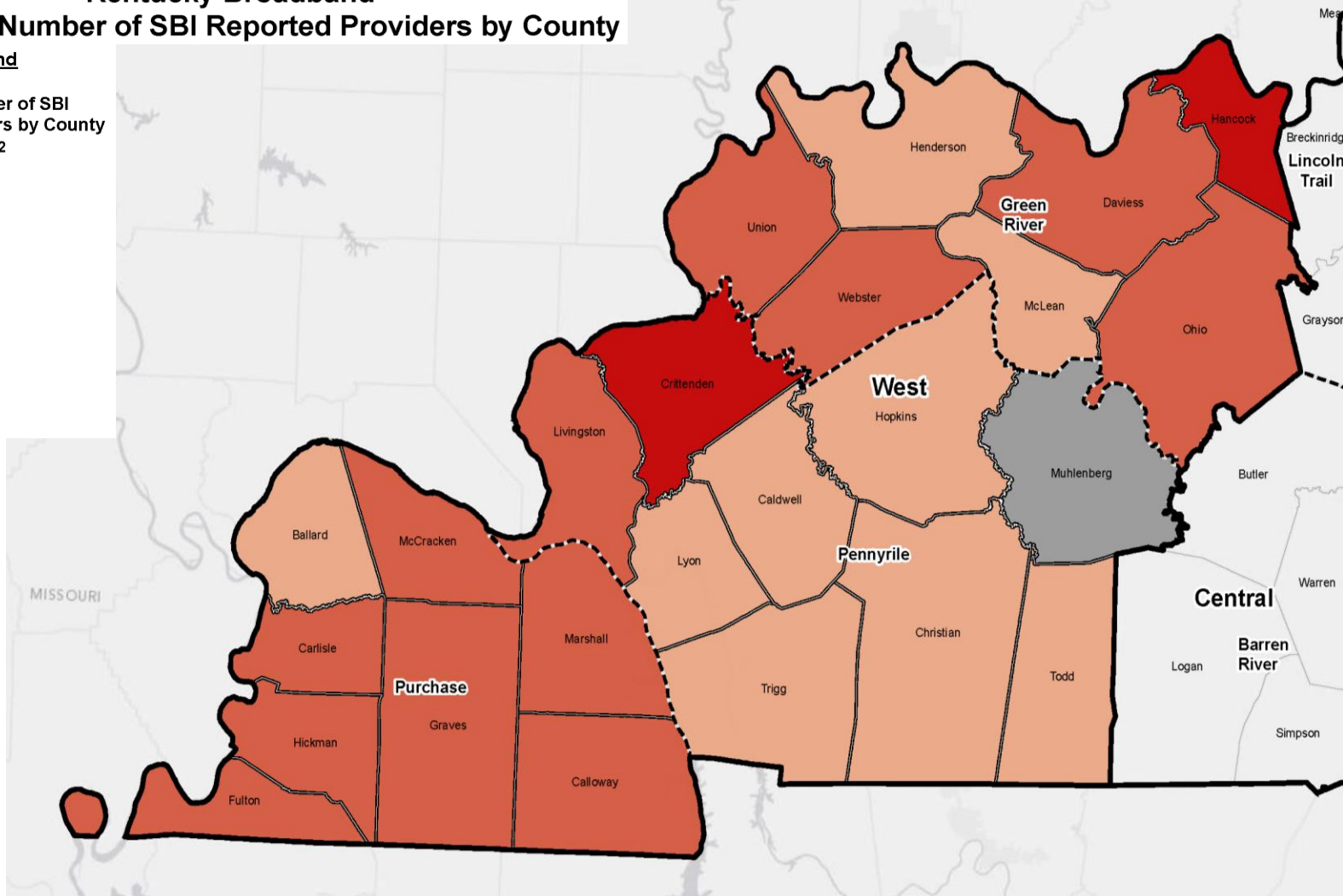
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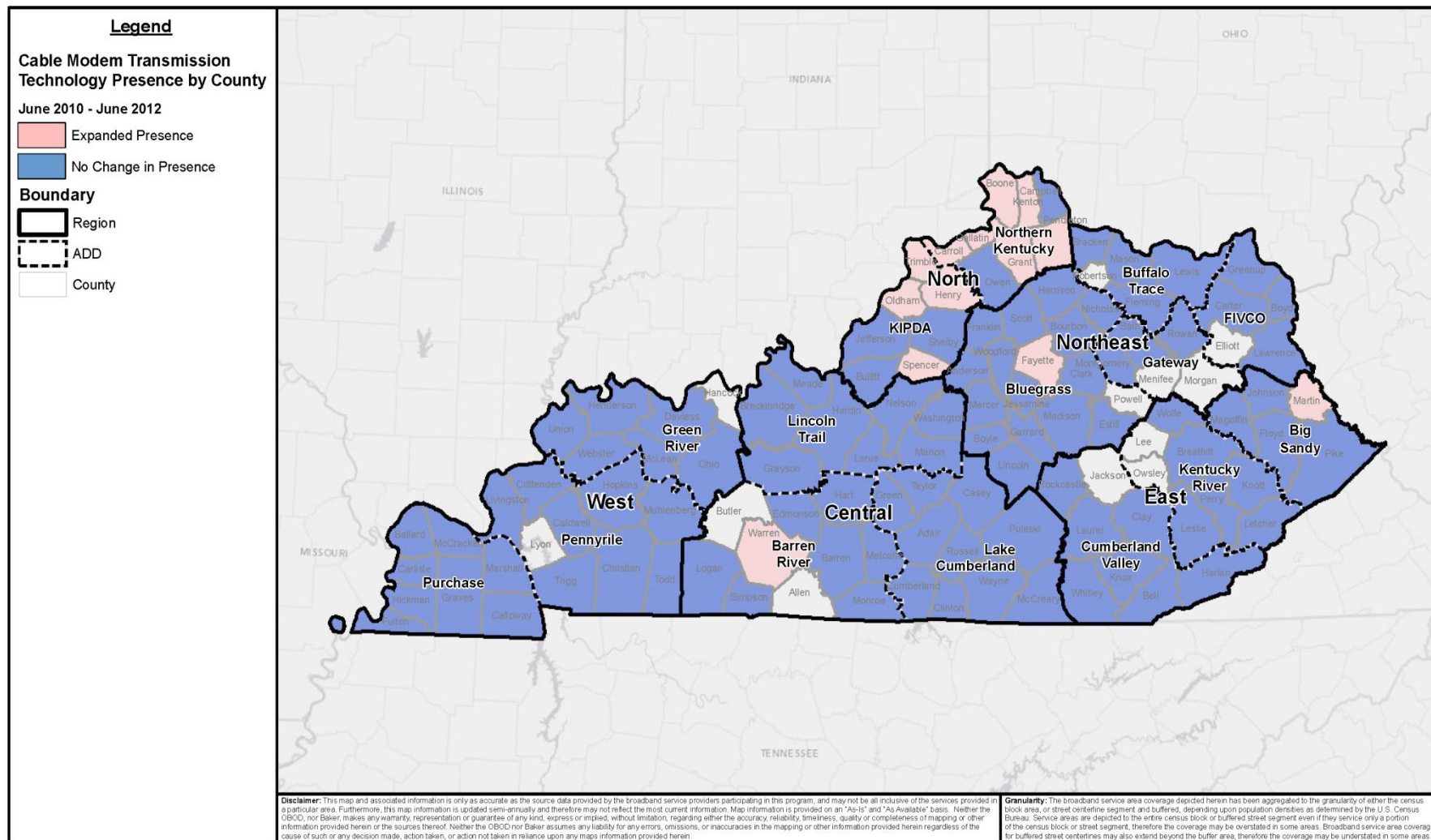
□ County

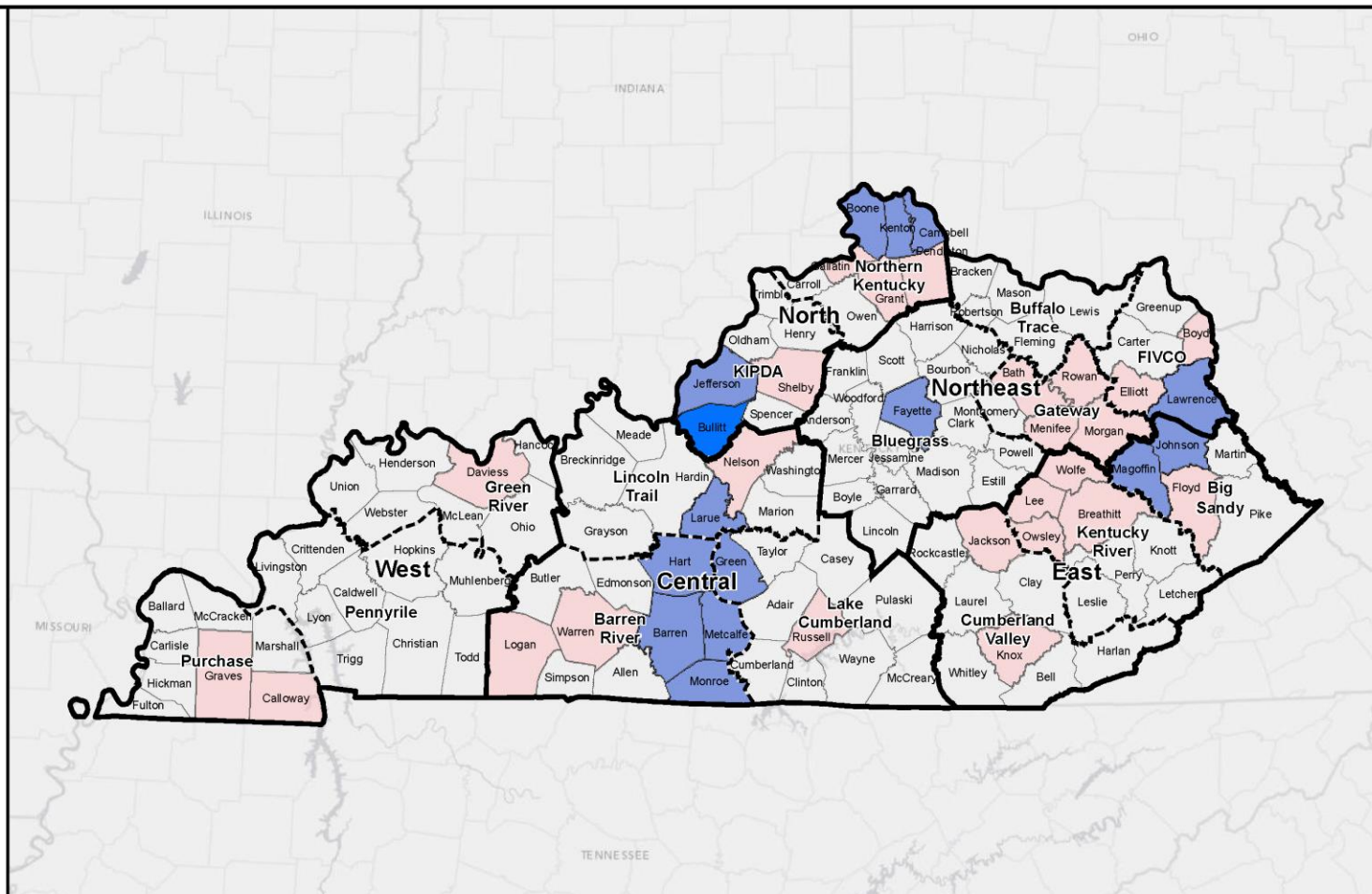




Increase in Number of SBI Reported Providers by County June 2010 - June 2012





County

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Kentucky Broadband Coverage Survey Data Organizational Availability/Utilization Levels

Legend

Community Anchor Institutions

Category

- Library
- Medical/healthcare
- Other community support - government
- Other community support - nongovernmental
- Public safety
- School - K through 12
- University, college, other post-secondary

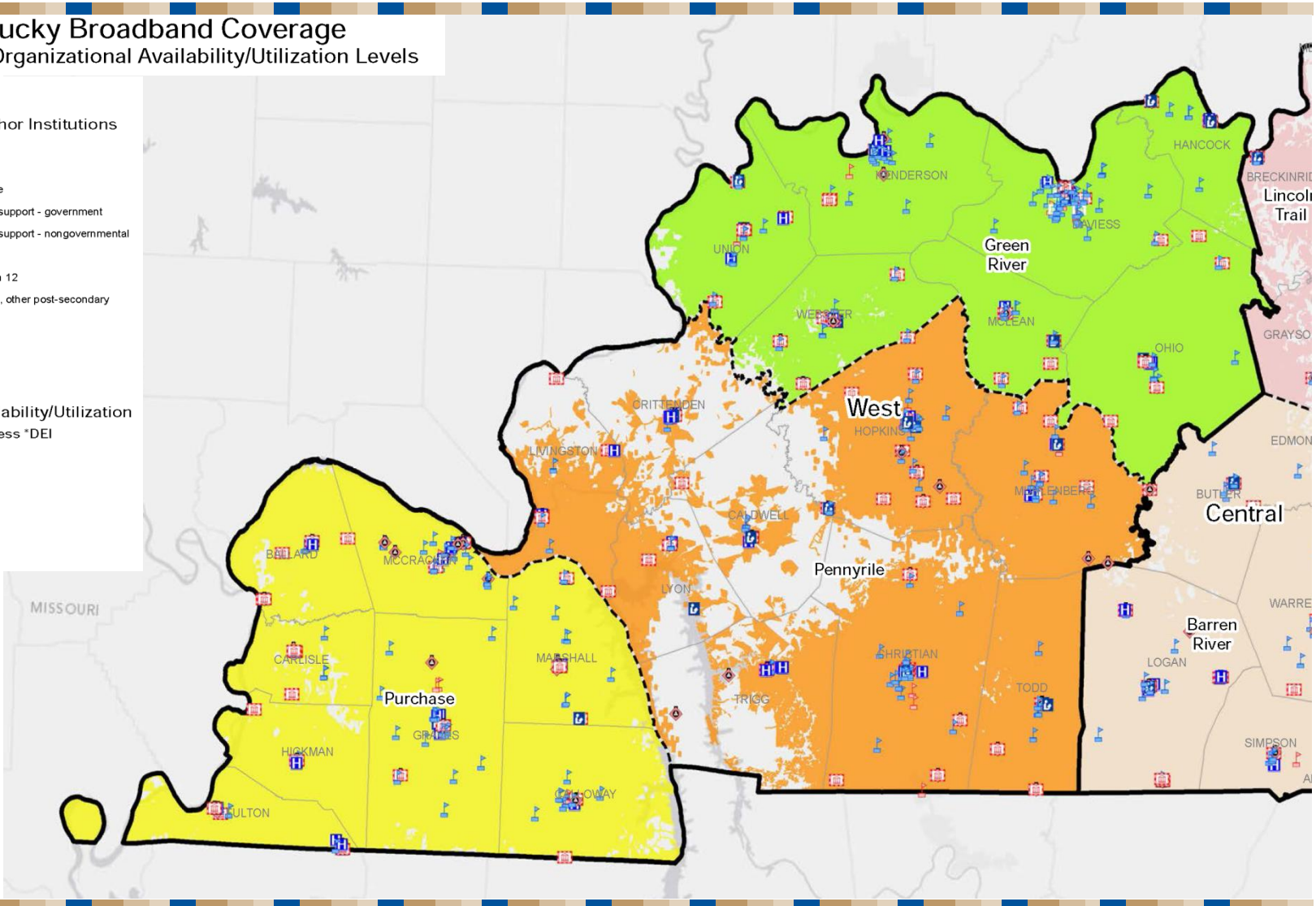
Boundary

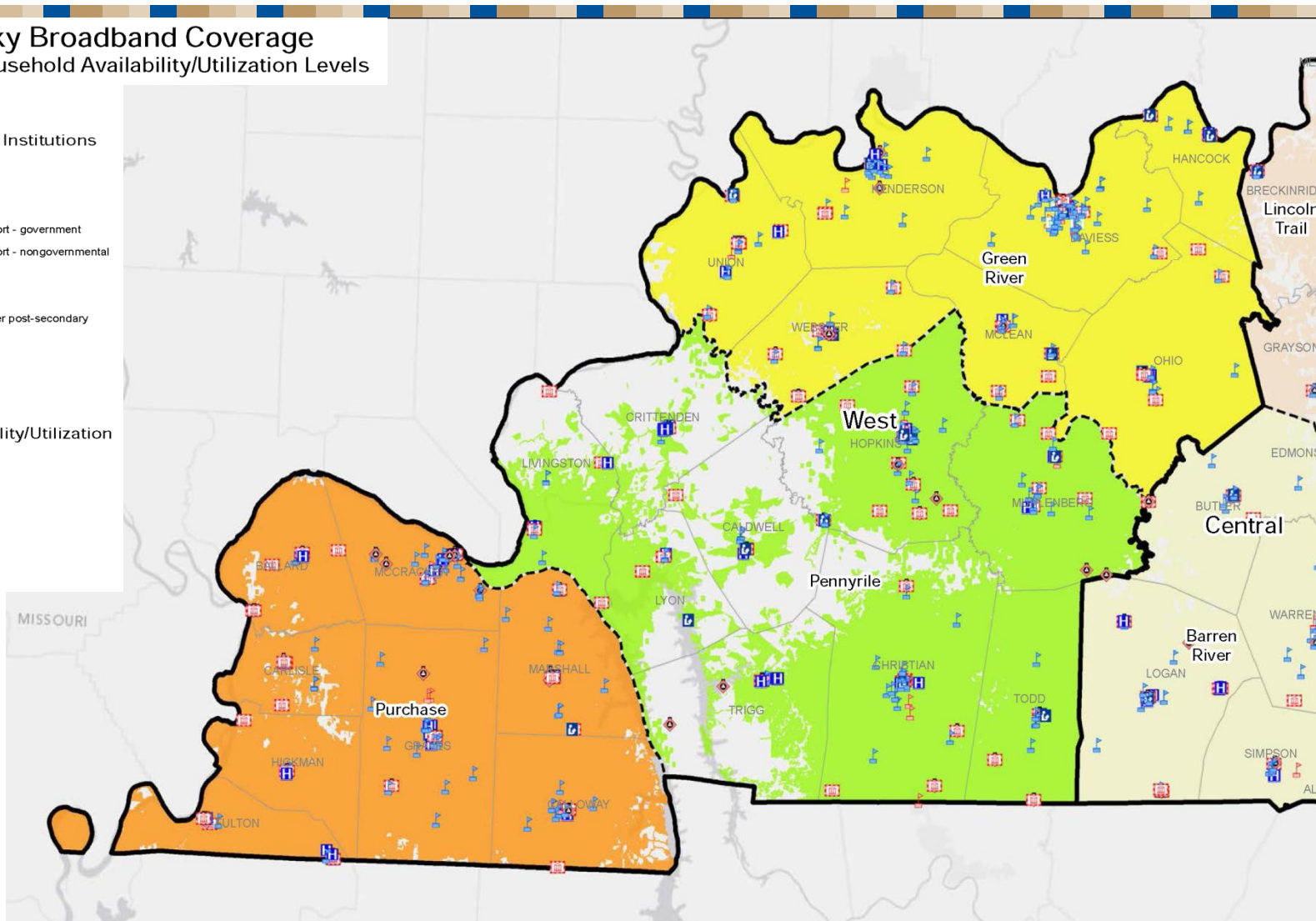
- Region
- ADD
- County

Broadband Availability/Utilization

Organization/Business *DEI

- 4.90 - 5.38
- 5.39 - 5.92
- 5.93 - 6.20
- 6.22 - 6.51
- 6.52 - 6.80





Leveraging Broadband for Economic or Social Development

Objectives

- Establish a foundation for setting priorities for broadband planning and programs
- Provide and discuss data and analysis on broadband adoption, and utilization
- Identify strategies to effect changes to address regional priorities
- Identify resources and energize leaders

Does Broadband Really Matter?

Broadband retains and attracts population and businesses

The smaller the business, the bigger the Internet's impact on jobs and revenues

21% of households have a home-based business, with 11% planning to start one in the coming year

Businesses and organizations reported that 33.2% of new jobs created in 2011 were attributed to use of the Internet

59% of business and organizations said broadband is essential for remaining in current location



Regional and Community Impacts



**Regional and community
impacts include
job creation and retention
during shift
to a knowledge economy**

Impact of Internet on Jobs - Part 1

Firms by Number of Employees	New Jobs	Lost Jobs	Net Jobs	# of Organizations	Current Employees
0 - 19	1,638	1,708	-70	542	10,179
20 - 49	1,146	1,274	-128	244	12,370
50 - 99	1,117	1,638	-521	292	13,905
100 - 499	3,308	2,684	624	763	40,757
500 or more	2,510	2,234	276	639	57,366
	9,719	9,538	181	2,480	134,577

Surveys across three states in 2010 and 1012

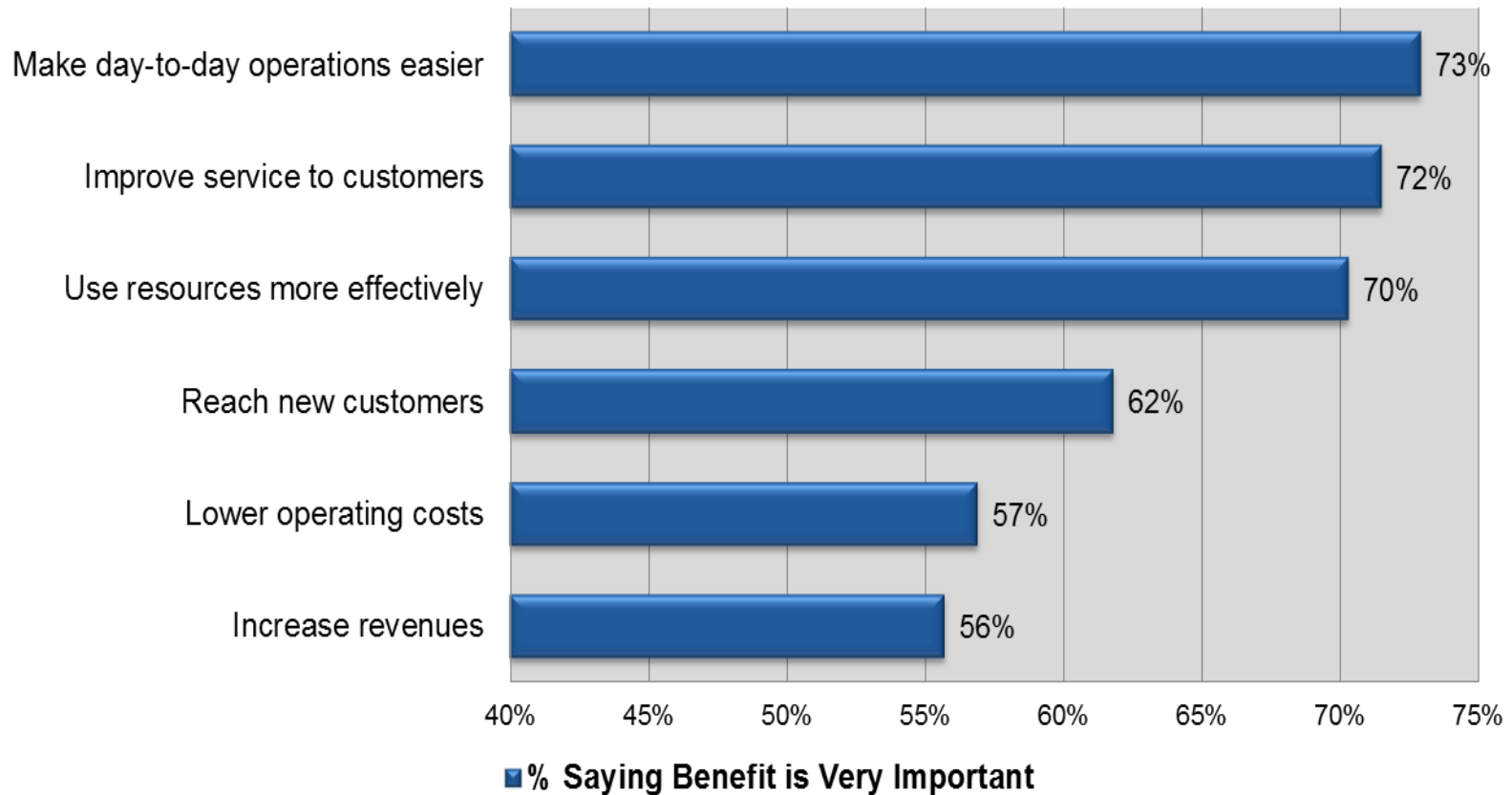
Impact of Internet on Jobs - Part 2

Firms by Number of Employees	New Jobs from Internet Use as % of all New Jobs	Share of All New Internet jobs	New Jobs from Internet Use	Lost Jobs from Internet Use	Net Jobs from Internet Use
0 - 19	33.1%	21.9%	542	111	431
20 - 49	21.3%	9.8%	244	16	228
50 - 99	26.1%	11.8%	292	40	252
100 - 499	23.1%	30.8%	763	61	702
500 or more	25.5%	25.8%	639	2	637
	25.5%	100.0%	2,480	230	2,250

Surveys across three states in 2010 and 2012

The Importance of Utilization

Six top benefits of Internet reported by businesses and organizations are:



So What?

Yes, broadband matters. But isn't integration of broadband into our region and economy already happening all around us?

Not for everyone or for all communities. The digital divide is real, and so are its impacts.

***Utilization of the Internet varies
greatly among businesses, organizations and
households,
with major impacts on productivity and
competitiveness***

DEi by Organizations and Businesses

Region	Rank	Median DEi	Difference from Median	# Establishments
North	1	6.70	0.29	483
Central	2	6.60	0.19	443
Northeast	3	6.31	-0.10	581
West	4	6.31	-0.10	458
East	5	6.21	-0.20	279
State Average		6.41		2,244

Internet Utilization by Employment Size

Smaller businesses are more likely to struggle to adopt new Internet applications and processes.

Employment Range	Median DEi Score	% of organizations in Kentucky
1 to 19	6.02	85.0%
20 to 49	6.89	9.5%
50 - 90	6.80	3.0%
250 or more	7.38	2.5%
All Size Ranges	6.41	

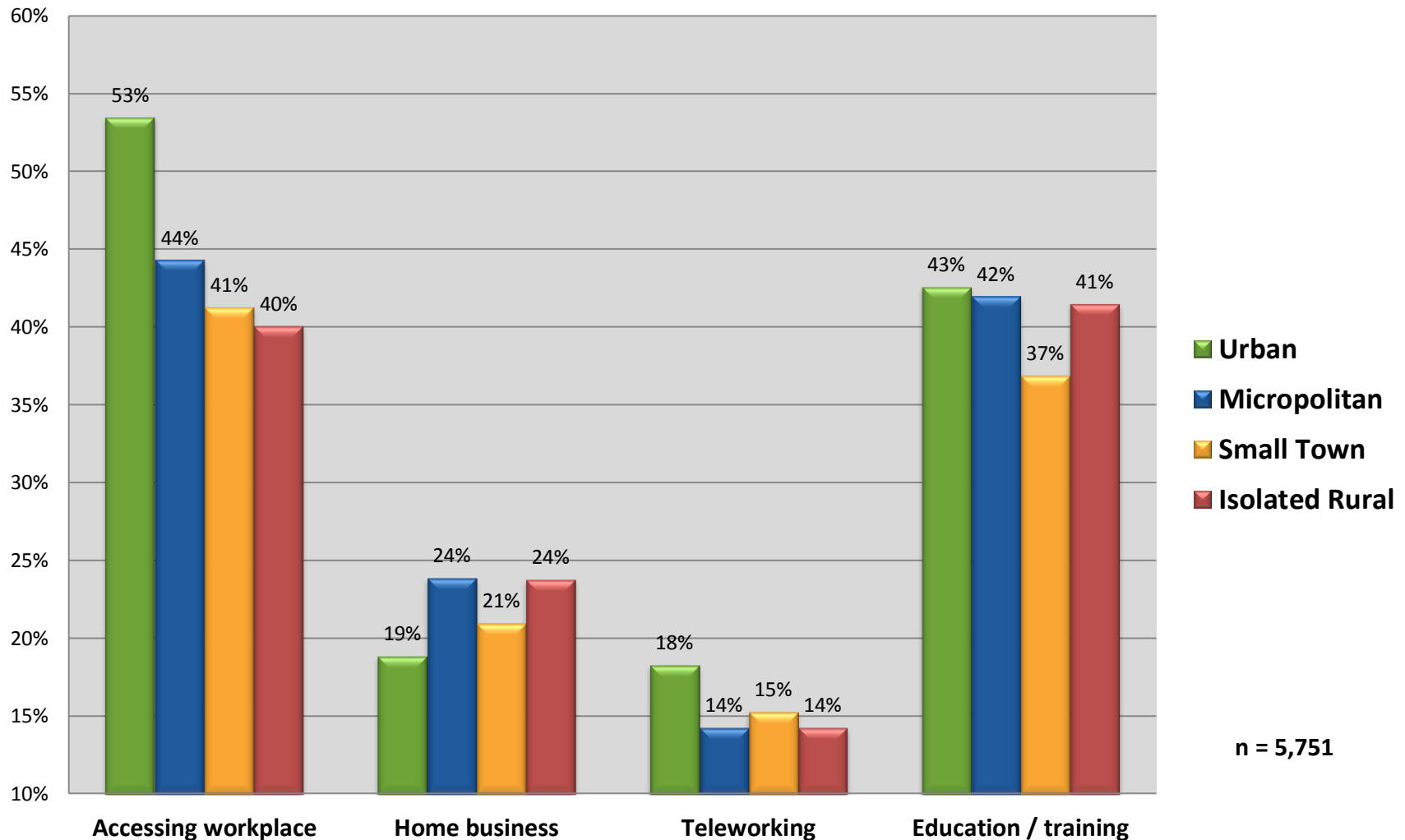
Impact of Income & Age on Internet Use

Age and income are significant determinants in adoption of Internet applications and process by households:

- The younger and the richer you are, the more you use
- The older and the poorer you are, the less you use

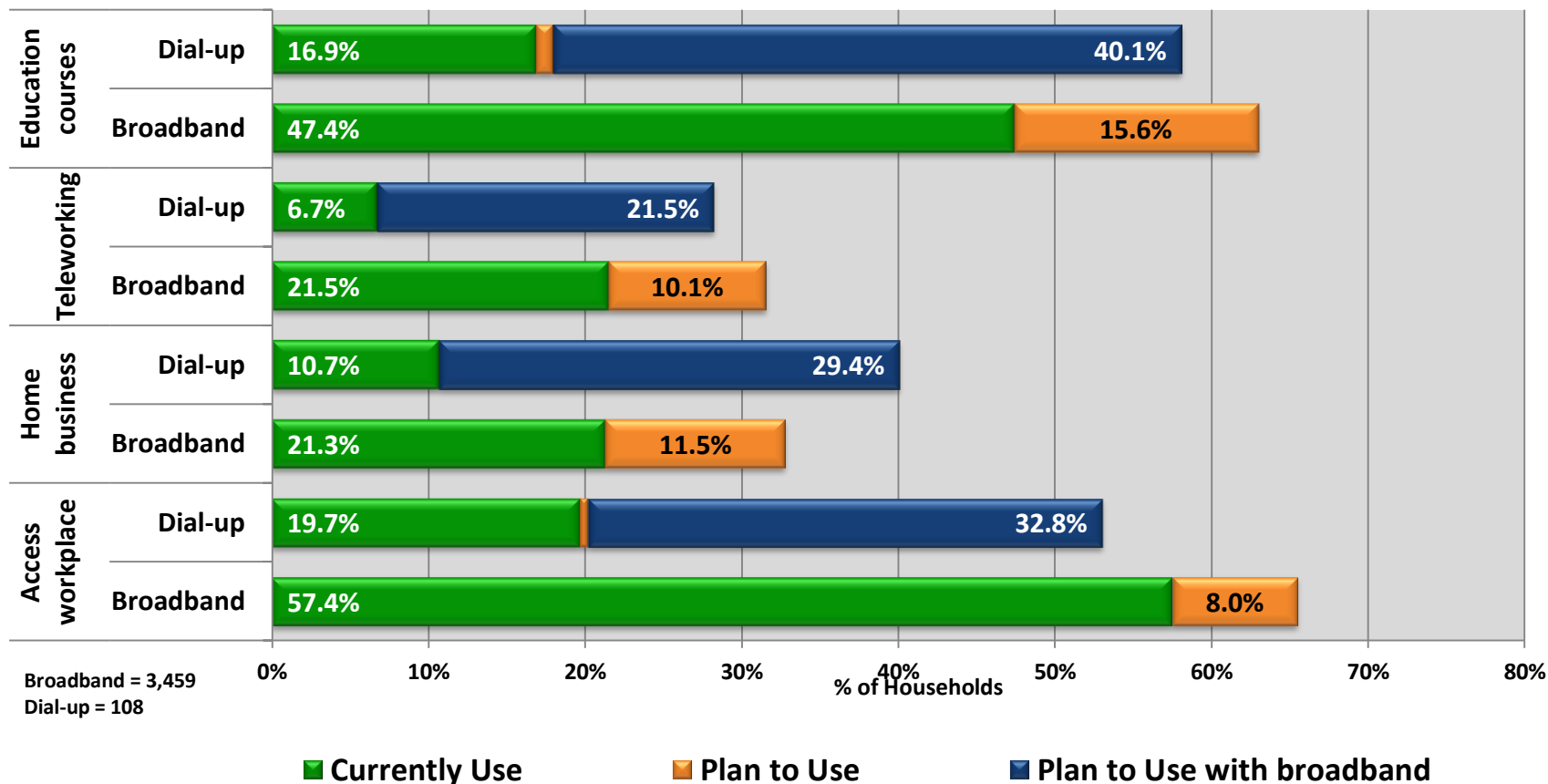
Respondent Age	Household Income				Overall
	Less than \$30,000	\$30,000 to \$49,999	\$50,000 to \$100,000	More than \$100,000	
18 to 34 years	5.9	6.7	7.1	7.3	6.5
35 to 54 years	5.6	6.1	6.7	7.1	6.3
55 to 64 years	4.9	5.4	6.0	6.3	5.7
65 years and over	4.8	4.4	5.5	6.1	5.2
Overall	5.5	5.9	6.5	6.8	

Rural / Urban Variation In Productivity Uses



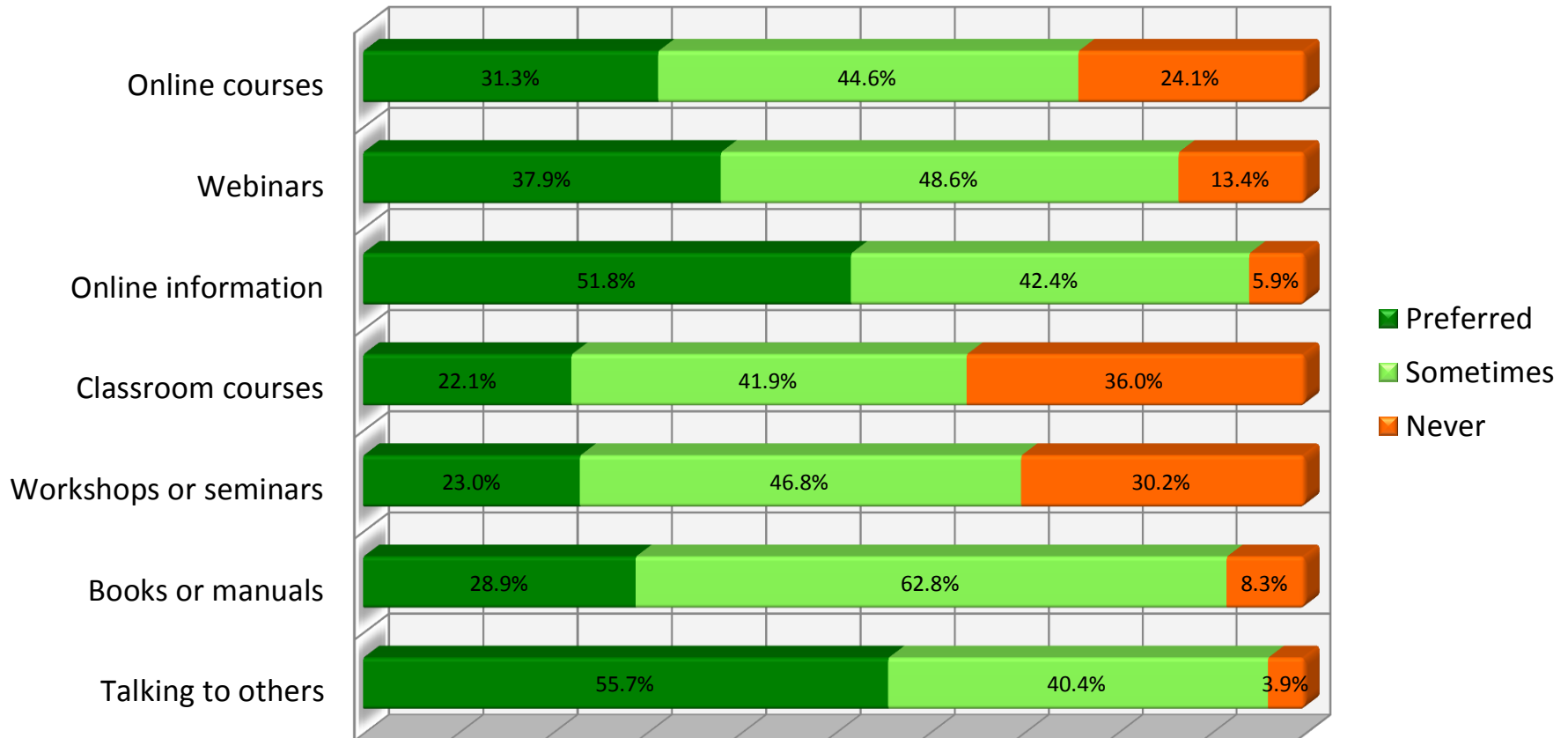
Broadband Availability - Household Impact

Potential Impact of Broadband on Dial-Up Households



Driving Adoption among Target Populations

Preferred Learning Methods for Seniors (65+)



**Target the population that underutilizes
and know how to reach them**

Broadband's Value to Households

Internet patterns of use depend on awareness

In the United States:

- 66% of households have broadband*
- 2/3 of Americans feel that broadband at home is important for finding out about jobs or learning career skills*
- Yet, 48% of non-Internet users do not go online because they do not see the value*

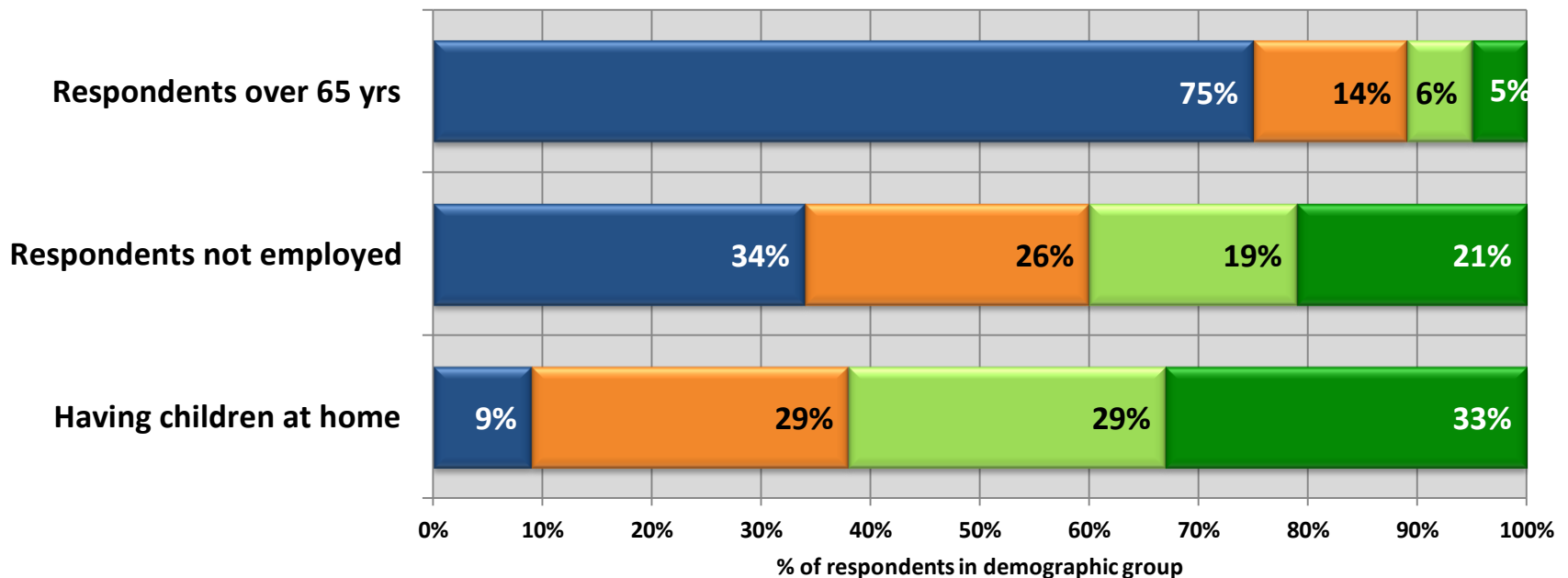


Connectivity ≠ Adoption ≠ Utilization

*Source: Home Broadband 2010, Pew Internet & American Life Project

Non-Adopters and their Households

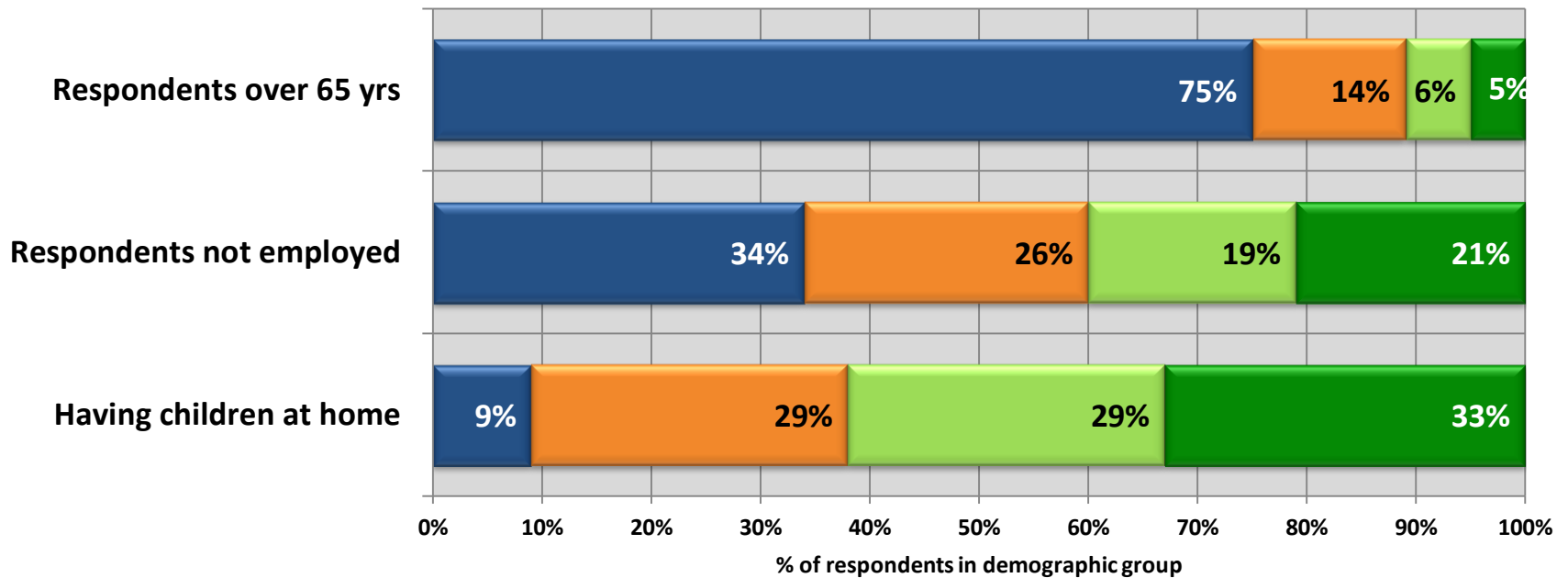
Presence of Internet Users in the Households



- No one in home uses the internet
- Someone else at home uses the internet at home
- Someone else at home uses the internet elsewhere
- Someone else at home uses the internet both at home and elsewhere

Causes of Non-adoption

Presence of Internet Users in the Households



■ No one in home uses the internet

■ Someone else at home uses the internet at home

■ Someone else at home uses the internet elsewhere

Access to Public Internet Facilities

West Region		
Availability of Public Access Facilities	% of Establishments	# of Establishments
Weekdays	98.3%	57
Evenings	44.8%	26
Weekends	36.2%	21

Purchase ADD		
Availability of Public Access Facilities	Pct. Establishments	# Establishments
Weekdays	100%	24
Evenings	33.3%	8
Weekends	25.0%	6

Kentucky		
Availability of Public Access Facilities	Pct. Establishments	# Establishments
Weekdays	98%	241
Evenings	47%	115
Weekends	38%	95

Vision-Based / Goals-Based Strategic Planning

- 1. Establish a vision statement** - This statement describes the future state of your community or target group at some point in the future.
- 2. Select the goals your organization must reach if it is to effectively work toward and achieve your vision** - Goals are general statements about what you need to accomplish to meet your vision and address major issues. Goals should be designed and worded to be SMART (specific, measurable, acceptable to those working to achieve the goals, realistic, timely). The vision and goals might be long-range, for example, for 3-5 years into the future.
- 3. Identify specific approaches (or strategies) that must be implemented to reach each goal**
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- 5. Compile vision, strategies and action plans into a Strategic Plan document.**
- 6. Monitor implementation of the Plan and update the Plan as Needed**

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More information is available online:

Kentucky's Broadband Mapping Initiative

<http://broadband.ky.gov>

Kentucky's Broadband Mapping Viewer

<http://www.bakerbb.com/kybroadbandmapping/>

Kentucky @ Work Broadband Page

<http://kentuckyatwork.ky.gov/Pages/Broadband.aspx>

The US Broadband Plan

<http://www.broadband.gov/>

The US Broadband Map (and Data Sets)

<http://broadbandmap.gov/>

Broadband Mapping & Community Search Tool

<http://broadbandsearch.sc.egov.usda.gov/DefaultARRA.aspx?program=ARRA>

US FCC Broadband Opportunities Page

http://wireless.fcc.gov/outreach/index.htm?job=broadband_home

And, our interactive Facebook Page

<http://www.facebook.com/KentuckyBroadband>

Or through our office:

***Commonwealth Office of Broadband
Outreach & Development***

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Broadband@KY.gov

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